

Andrew Chalmers & Mitchell Limited

443-447 Hillington Road, Glasgow G52 4QW, Scotland, U.K.

BOLLARDS LOW MOUNT OUTDOOR LIGHTING











178mm

BOLLARDS

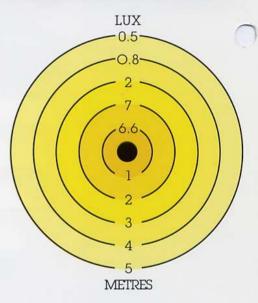
LOW MOUNT OUTDOOR LIGHTING

Chalmit Bollard luminaires are designed to give a well but unobtrusively lit ambience for amenity and decorative purposes in parks, walkways, precincts and prestige civic and commercial premises.

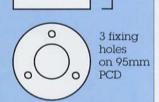
Highly vandal resistant the luminaires feature crisp styling in their heavy duty cast aluminium housing. Clear polycarbonate rings beneath each louvre section provide edge-light sparkle. This combination delivers a low brightness, symetrical spread of illumination.

FEATURES

- Available either round or square.
- Highly resistant to damage.
- External fasteners are stainless steel, tamper proof and countersunk.
- Protection IP44
- Standard colour Black with white louvres (White, Red & Yellow available on request)
- Control Gear Internal
- Maintenence Top cover lifts free leaving the lamp accessable for replacement.
- Finish Cast Aluminium head with steel post. Coated with baked on polyurethane paint.



Typical isolux diagram for BOLLARD 7 and BOLLARD 8 using 80 watt mercury vapour lamp 3700 lumens.



705mm

Order Ref

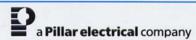
Round	Square	Lamp	Weight KG	
BOL7-ES	BOL8-ES	100W Incondescent	9.1	
BOL7-PL9	BOL8-PL9	9W PL Flourescent	9.3	
BOL7-80	BOL8-80	80W MBFU	10.4	
BOL7-70 BOL8-70		70W HPS	10.4	



Andrew Chalmers & Mitchell Limited

443-447 Hillington Road, Glasgow G52 4QW, Scotland, U.K. Telephone: 041-882 5553 041-882 3318

Telex: 779378 CHALMT G Fax: 041-883 3704



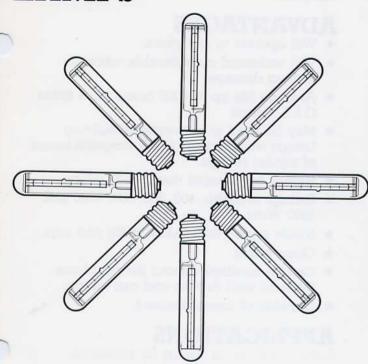


Andrew Chalmers & Mitchell Limited

443-447 Hillington Road, Glasgow G52 4QW, Scotland, U.K. Telephone: 041-882 3318 041-882 5553

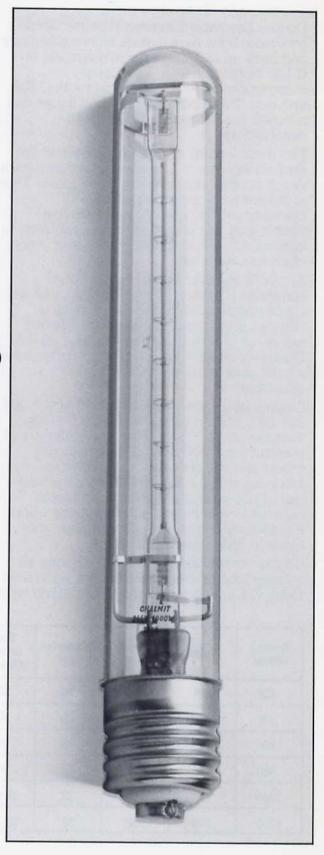
Telex: 779378 CHALMTG Fax No 041 883 3704

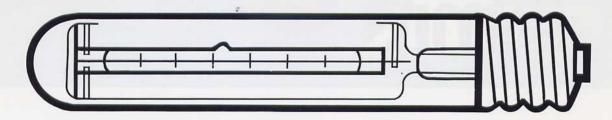
DOUBLE ENVELOPE TUNGSTEN HALOGEN LAMPS



WILL OPERATE IN ANY PLANE

- + G.E.S. (E40) END CAP
- + RESISTANT TO VIBRATION
- + UP TO 4000 HOURS LIFE





Double Envelope Tungsten Halogen lamps give more light; have a much higher efficiency and have up to 4 times the average life of G.L.S. tungsten lamps. Each lamp incorporates an outer glass jacket with G.E.S. end cap. This means that Chalmit lamps can be used in all standard G.E.S. (E40) lampholders.

The great feature of these lamps is that the Burning Position is Universal — which means that the lamps can operate in any plane. This is a great advantage compared with conventional Tungsten Halogen (Iodine) double end cap lamps which are required to operate ±4° of horizontal. Control gear is not, of course, required.

Another important factor is the ease of handling of Chalmit Tungsten Halogen lamps. Conventional double end cap Tungsten Halogen lamps must not be used if finger marks, or grease traces are present on the Quartz envelope. Because Chalmit lamps have a hard glass outer jacket this problem is eliminated.

Chalmit lamps are available in 5 ratings — 100, 300, 500, 1000 and 1500 Watts. The colour temperature is 3200°K. Due to the method of construction the lamps are mechanically robust and will withstand considerable vibration, without damage. They have heat sinks built-in, thus eliminating problems associated with double end cap lamps where it is essential, in most lighting fittings, that external heat sinks be used.

Chalmit lamps may be used in virtually all lighting fixtures which will accept equivalent rating G.L.S. Tungsten lamps, from shovel type

fittings to floodlights. Expensive ballasts, capacitors and wiring alterations are not necessary — merely screw-in replacement Chalmit lamp.

The Chalmit Double Envelope Tungsten Halogen lamp therefore reduces maintenance through its resistance to damage from vibration or mishandling together with its extra long lamp life compared with G.L.S. Tungsten.

ADVANTAGES

- ★ Will operate in any plane.
- ★ Will withstand considerable vibration without damage.
- ★ Average life up to 4000 hours i.e. 4 times G.L.S. lamps.
- ★ May be used in conventional lighting fittings which accept G.L.S. tungsten lamps of similar ratings.
- ★ Higher light output than G.L.S. lamps.
- ★ Ratings available 100, 300, 500, 1000 and 1500 Watts.
- ★ Single ended with G.E.S. (E40) end cap.
- ★ Glass jacket.
- ★ Can be handled without the problems inherent with double end cap lamps.
- ★ Capable of being dimmed.

APPLICATIONS

Suitable for use in fittings for industrial, commercial, and marine lighting.

For example: Factories; Building Sites; Steelworks; Oil, Gas & Petrochemical Industries; Docks; Church Lighting etc.

Rating Watts	Volts	Length mm	Diameter mm	Total Lumen Output	Cap	Frequency	Average Life Hours	Type No. Ref.
100	24	100	30	2000	E27	A.C. or D.C.	2000	U3023/0100
300	120	220	38	6000	E40	A.C. or D.C.	2000	U3074/0300
500	120	220	38	9500	E40	A.C. or D.C.	2000	U3074/0500
500	245	220	38	9500	E40	A.C. or D.C.	2000	U3094/0500
1000	120	260	38	22,000	E40	A.C. or D.C.	4000	U3074/1000
1000	245	260	38	22,000	E40	A.C. or D.C.	4000	U3094/1000